

XXXVIII COMU 2019 – Congresso Médico Universitário da FMUSP

Researches Classified – Panels Award – Clinical Area

Physical activity and neighborhood factors: violence perception and conditions for physical activity

Pedro Henrique Rodrigues Santana, Paulo Lotufo de Andrade

Faculdade de Medicina FMUSP, Universidade de São Paulo, São Paulo, SP, BR

Introduction: Physical activity is one of the most important modifiable factors associated with the morbimortality of chronic and non-communicable diseases. There are many well established individual and environmental determinants associated with physical activity, such as income and the presence of parks and green spaces. In some regions, especially in low and middle income countries like Brazil, violence is a complex and highly prevalent sociopolitical factor that deeply affects the way people interact with their environment. Therefore it is relevant to understand in which way the perception of violence affects people's health habits, among them, physical activity. The association between violence and physical activity has not been very well established in the literature. Most studies were done in countries with low crime rates and have found inconsistent findings.

Objective: Study the association between violence perception and physical activity in a cohort study from six Brazilian cities.

Methodology: We conducted a cross-section retrospective study using data from the first wave of the ELSA study, a cohort study with active and retired adult workers from six Brazilian universities. We gathered information regarding race, family income, education, gender and perception of the conditions for physical activity in the neighborhood. We classified as active or inactive based on performing any type of weekly physical activity. For violence perception we created an index based on six questions regarding safety and violence perception in the neighborhood. We excluded participants that have reported being robbed at least once. For the statistical analyses we used SPSS. We first conducted a chi-squared tests followed by a multivariate regression logistic to see the variables associated with exercising.

Results: We had a total of 15,105 participants, out of which 5,990 (42.5%) were not physically active and 7,911 (56.1%) were active. For the neighborhood violence perception index 7,294 (51.7%) were classified as safe and 6,756 (47.9%) unsafe. We did not find a significant association between physical activity and violence perception in the univariate analyses ($p=0.739$). However, after controlling for education, sex, race, income and age, there was a negative statistically significant association between violence perception and physical activity (O.R. 0.881 p 0.000 95%C.I. 0.821 0.946).

Discussion and conclusion: The association found in this study corroborates our initial hypothesis that a greater perception of neighborhood violence is associated with reduced physical activity. Other studies also done in Brazil have found a similar association, however ours is the first to consider multiple cities in the analyses. A few limitations of our study were that we did not discriminate between time and intensity of the activity and that our population was a higher socioeconomic and education level when compared to the general population. However, we still consider that the significant reduction of physical activity in people with a higher perception of violence further elucidates in which ways the toxic levels of violence present in Brazilian society affects the habits and consequently the health of the population.

Keywords: Violence; Physical activity; Stress.